

Appl. No. 09/877,473

Amdt. Dated March 27, 2006

Reply to Office Action of November 29, 2005

REMARKS

This is a full and timely response to the non-final Office action mailed November 29, 2005. Reexamination and reconsideration in view of the foregoing amendments and following remarks is respectfully solicited.

Claims 9, 11-13, 15-17, 19, 20, and 23 are now pending in this application, with Claims 15 and 23 being the independent claims. Claims 9, 11-13, 15, 16, 19, and 20 have been amended, Claims 1-8, 10, 14, 18, 21, and 22 have been canceled, and Claim 23 is newly presented herein. No new matter is believed to have been added.

Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1 and 8 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. As these claims have been canceled herein, this rejection is believed to be rendered moot. Moreover, Applicants submit that none of the remaining claims include the alleged deficiency noted in the Office action.

In view of the foregoing, reconsideration and withdrawal of the § 112, second paragraph rejection is requested.

Rejections Under 35 U.S.C. § 103

Claims 1, 3, 5-8, 12, 13, 21, and 22 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over U.S. Patent No. 6,157,955 (Narad et al.), and a publication entitled, "Using the Accelar 710 Server Switch" (Nortel), Claims 2 and 9 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Narad et al., Nortel, and a publication entitled, "Introduction to SSL" (Netscape), Claims 4 and 11 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Narad et al., Nortel, and a publication entitled, "A Message Authentication Code based on Latin Squares" (Bakhtiari et al.), and Claims 14-20 rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Narad et al., Nortel, a publication entitled, "An Overview of SSL" (Shostack), and a publication entitled, "RFC 879 – TCP Maximum Segment Size and related topics" (Po). These rejections are respectfully traversed.

As to the above-noted rejections of Claims 1-8, 10, 14, 18, 21, and 22, it is noted

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that these claims have either been canceled or have had their dependencies changed, thereby mooting the rejections. As to independent Claims 15 and 23, these claims now recite a method implemented in an SSL proxy and an SSL proxy, respectively, that asynchronously decrypts SSL packets associated with a given SSL record that are sent to, and subsequently released from, a hold queue, while the given SSL record is still being received *in toto*. Specifically, each of these claims now recites, *inter alia*, that the SSL proxy determines if received packets are SSL packets by examining the header of each packet, decrypts SSL packets that are received in order, places SSL packets that are received out of order in a hold queue, checks the hold queue to determine if the SSL packets placed therein are next in order for a given record, releases SSL packets from the hold queue if the SSL packets in the hold queue are next in order for a given record, decrypts the encrypted portion of each SSL packet released from the hold queue to form decrypted SSL packets, checks the decrypted SSL packets to determine if all SSL packets expected for a given record have arrived, and outputs the decrypted packets to a server computer when all of the SSL packets expected for a given record have arrived.

Narad et al. discloses a general purpose packet processing platform that uses a policy engine to transform inbound packets to outbound packets. Based on applications running on a policy processor, an inbound packet can be transmitted, decrypted, classified or have some other action performed on it. As is shown in FIG. 4 of Narad et al., the packets are received from, and released to, Ethernet connections. Thus, Narad et al. discloses a device that operates at the local area network level.

Nortel discloses a hardware switch that can process SSL traffic. The switch is positioned in front of one or more servers, to intercept, process, and forward SSL transactions to the server in plaintext.

As was noted in Applicants' previous responses, it is clear that Narad et al. explicitly teaches away from the combination proposed in the Office action. Specifically, Narad et al. explicitly teaches that switched-based packet processing is not cost effective, that switch-based processors lack processing power, and that porting applications to switches is difficult. See col. 3, ll. 18-43. This explicit teaching of the undesirability of using switches for packet processing renders alleged combination wholly improper.

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The Office attempts to refute this clear teaching away by arguing that Nortel was cited only for its teachings of SSL processing. This refutation, however, completely misses the point, and wholly vitiates the entire legal doctrine of "teaching away," which is supported by much legal precedent. The entire point of the teaching away doctrine is that, in the context of the instant application for example, one of ordinary skill in the art would not have even considered using Nortel to modify Narad et al. for any reason whatsoever. Why? Because Narad et al. explicitly teaches that the use of switches for packet processing is undesirable. Thus, no ordinarily skilled artisan would have been motivated in the least to apply the teachings of Nortel to Narad et al.

Moreover, the motivation provided in the Office action for making the alleged modification is based on the efficacies of the Accelar 710 server switch itself that are disclosed in Nortel. In particular, Nortel explicitly states that "[t]he Accelar 710 Server Switch alleviates server resources by offloading security processing from the server." Nortel at 1-1. Thus, the indication in the Office action that Nortel is being relied on only for its teaching of SSL processing is completely disingenuous.

In addition to the above-noted deficiencies of the proffered rejections, Applicants additionally submit that neither Narad et al. nor Nortel, either alone or in combination, disclose or even remotely suggest the features now recited in independent Claims 15 and 23. Indeed, independent method Claim 15 now recites, albeit more clearly, the features that were recited in dependent Claim 18, and newly presented apparatus Claim 23 now recites an SSL proxy configured to implement functions that parallel these steps. Indeed, it was readily admitted in the Office action that this combination of references does not disclose this combination of features, and relied on Shostack and Po to allegedly cure this deficiency. However, Applicants submit that none of the cited references suggest the combination of features that are now recited in independent Claims 15 and 23.

Both Narad et al. and Nortel have been summarized above and neither of these references, either alone or in combination, provides any hint of teaching of asynchronous decryption of SSL packets associated with a given SSL record. As regards Shostack, this reference is merely a document that provides an overview of the SSL protocol, and provides to teaching or suggestion regarding asynchronous decryption of SSL packets

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associated with a given SSL record. Similarly, Po is document that was provided merely to provide a clarification of the TCP specification as it relates to maximum segment size, and also provides to teaching or suggestion regarding asynchronous decryption of SSL packets associated with a given SSL record.

In view of the foregoing, Applicants submit that a prima facie case of obviousness has not, and cannot, be established from the teachings of Narad et al., Nortel, Shostack, and Po, nor any of the other citations of record, namely Netscape and Bakhtiari et al. As such, reconsideration and withdrawal of the § 103 rejections is solicited.

Finally, Applicants wish to note that the Examiner took Official Notice that it would have been obvious to an ordinarily skilled artisan to check a hold queue to determine if all packets for a given record have arrived. Although this feature is not explicitly recited in independent Claim 15 as it is currently presented, Applicants do wish to seasonably traverse this statement of what is allegedly well-known, and submits a demand for evidence of the same. See M.P.E.P. § 2144.03.

Conclusion

Based on the above, independent Claims 15 and 23 are patentable over the citations of record. The dependent claims are also deemed patentable for the reasons given above with respect to the independent claims and because each recite features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

The other art of record is also not understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

Hence, Applicants submit that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

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If for some reason Applicants have not paid a sufficient fee for this response,
please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit
Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

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